

One of those statewide initiatives is the Strategic Highway Corridor (SHC) Vision Plan¹ adopted by the Board of Transportation on September 2, 2004 and last revised on July 10, 2008. The SHC Vision Plan represents a timely initiative to protect and maximize the mobility and connectivity on a core set of highway corridors throughout North Carolina, while promoting environmental stewardship through maximizing the use of existing facilities to the extent possible, and fostering economic prosperity through the quick and efficient movement of people and goods.

The primary purpose of the SHC Vision Plan is to provide a network of high-speed, safe, reliable highways throughout North Carolina. The primary goal to support this purpose is to create a greater consensus towards the development of a genuine vision for each corridor – specifically towards the identification of a desired facility type (Freeway, Expressway, Boulevard, or Thoroughfare) for each corridor. Individual Comprehensive Transportation Plans shall incorporate the long-term vision of each corridor. Refer to Appendix A for contact information.

In the development of this plan, travel demand was projected from 2010 to 2035 using the Metrolina Regional Model (version MRM09v1.0), adopted on March 25, 2010. The Metrolina Regional Travel Demand Model was developed as a primary tool for evaluating existing and future travel in the region, encompassing the Cabarrus-Rowan MPO, Gaston Urban Area MPO, Mecklenburg-Union MPO, a portion of the Lake Norman RPO, a portion of the Rocky River RPO, York County, and a portion of Lancaster County in South Carolina. Stanly County is within the Rocky River RPO. Travel demand models are developed to replicate travel patterns on the existing transportation system as well as to estimate travel patterns for 2035. In addition, local land use plans and growth expectations were used to develop future growth rates and patterns. The established future growth rates were endorsed by the Rocky River RPO May 2008.

Existing and future travel demand is compared to existing roadway capacities. Capacity deficiencies occur when the traffic volume of a roadway exceeds the roadway's capacity. Roadways are considered near capacity when the traffic volume is at least eighty percent of the capacity. Refer to Figures 2 and 3 for existing and future capacity deficiencies.

Capacity is the maximum number of vehicles which have a "reasonable expectation" of passing over a given section of roadway, during a given time period under prevailing roadway and traffic conditions. Many factors contribute to the capacity of a roadway including the following:

- Geometry of the road (including number of lanes), horizontal and vertical alignment, and proximity of perceived obstructions to safe travel along the road;
- Typical users of the road, such as commuters, recreational travelers, and truck traffic;

¹ For more information on the SHC Vision Plan, go to: <http://www.ncdot.gov/doh/preconstruct/tpb/SHC/>.